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PROMPTING PATRON SAFETY BELT USE AT A SUPERMARKET

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We used a reversal (ABAB) design to assess the effects of a personal prompt on safety belt usage by grocery store patrons. A personal prompt delivered by grocery carriers resulted in a 12% increase in the number of patrons exiting the parking lot with their safety belts buckled. This simple, low-cost intervention offers potential savings to society from increased safety belt use.

DESCRIPTORS: safety belts, community safety, prompting

Safety belt campaigns have become widespread because of the dangers of driving. Costs resulting from 40,716 deaths, 5.2 million injuries, and 27 million damaged vehicles were $150.5 billion in 1994 alone (National Highway Traffic Safety Administration, 1996b). Motorists wearing lap and shoulder safety belts in the front seat reduce the risk of fatal injury by 45% and reduce the risk of moderate-to-critical injury by 50% (National Highway Traffic Safety Administration, 1996a). From 1982 to 1995, safety belts have saved approximately 74,769 lives.

Geller (1991) suggested that incentive-based procedures, in which data are collected through repeated observation of the same participants, constitute the most successful programs for promoting safety belt use. Although such procedures increase safety belt use, some situations only permit the manipulation of antecedent conditions and observation of different participants in each session. Ferrari and Baldwin (1989) found that a combination of prompts and personal contact with parents increased the frequency with which parents buckled their children into grocery carts. Similarly, Geller, Johnson, and Pelton (1982) increased safety belt use by drivers by providing visual prompts and participation in a game. This study evaluated a low-cost, personal prompting approach to increasing safety belt use by patrons at a supermarket.

METHOD

Participants and Setting

Participants were those patrons who received assistance with their groceries from grocery carriers at a supermarket in a southeastern city. All 10 grocery carriers (9 males and 1 female, ages 17 to 63 years) who

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worked during the observation hours volunteered to participate in the study. The state has a mandatory safety belt law.

Response Definitions

An occurrence of safety belt use was counted each time a patron buckled the safety belt upon entering his or her car before leaving the parking lot of the supermarket. Automatic shoulder belts were counted as an occurrence of safety belt use. An occurrence of the personal prompt was counted each time a grocery carrier assisted a patron to his or her car and said to the patron, "Have a nice day, and remember to wear your safety belt for a safe ride home," within 3 m of the patron's car. This prompt was to be given at the end of the encounter with the patron, just before the patron entered his or her car.

Observation Procedures and Data Collection

Observers were five undergraduate students who had been trained by the first author to listen for a prompt given by the grocery carrier to the patron and to observe the safety belt use of the driver when exiting the parking area. During data collection, three or four observers were stationed outside the grocery store each evening (from 6:00 to 7:00 p.m. over 7.5 weeks), disguised as patrons carrying grocery bags that were used to conceal their data sheets. Two observers unobtrusively followed each grocery carrier helping the assisted patron. Observers stood close enough to listen to the conversation between the grocery carrier and the patron and to determine whether the patron buckled his or her safety belt. To remain inconspicuous, the observers pretended that they forgot where they parked or that they had misplaced their car keys. The observers used their data sheets to record whether a prompt was given and whether the patron wore a safety belt.

Percentage of safety belt use was calculated by dividing the number of occurrences by the number of occurrences plus the number of nonoccurrences and multiplying by 100%. During the personal prompt phases, only those observations in which a prompt was given were counted and recorded (i.e., if for some reason a prompt was not provided, safety belt use was not scored). During the two prompting conditions, grocery carriers prompted an average of 94% and 98%, respectively, of patrons whose bags they carried out of the store.

Interobserver agreement was calculated by dividing the number of agreements by the number of agreements plus disagreements multiplied by 100%. A total of 295 observations were conducted over 30 days (M = 8; range, 4 to 14). A second observer was present during all observation sessions, and interobserver agreement was calculated on 76% of the observations. Daily agreement for safety belt use averaged 99% (range, 75% to 100%).

Experimental Design and Conditions

An ABAB reversal design was used to assess the effects of the personal prompt. During the baseline condition (A), all patrons who had their bags carried out by the grocery carriers were observed unobtrusively for safety belt use. During the personal prompting condition (B), grocery carriers provided a verbal prompt to the patron, and only those encounters in which the personal prompt was provided were included in the final analyses of the prompting condition.

RESULTS AND DISCUSSION

Figure 1 shows that, during the initial baseline condition, 64% (range, 20% to 80%) of patrons who had their groceries carried out of the store wore a safety belt as they exited the parking lot. During the initial personal prompt condition, 78% (range, 25% to 100%) of patrons who were

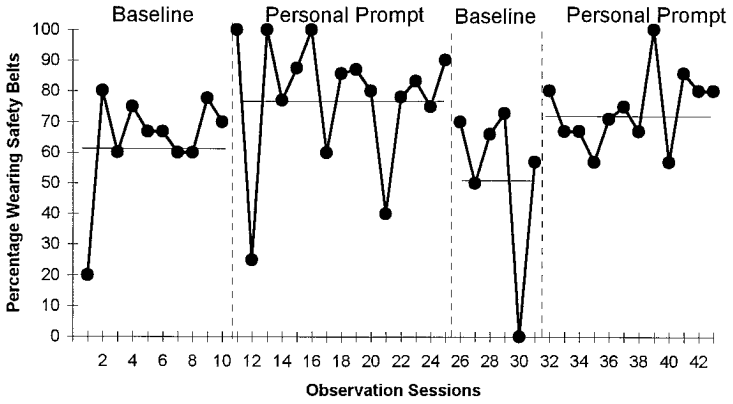

Figure 1. The percentage of patrons wearing safety belts across four phases: baseline (A), personal prompt (B), baseline (A), and personal prompt (B).

prompted wore a safety belt. During the return to baseline, safety belt use returned to 63% (range, 50% to 73%). In the final personal prompt condition, safety belt use averaged 74% (range, 57% to 100%) for the prompted patrons.

The results of this study suggest that a verbal prompt from grocery carriers can increase safety belt use by patrons leaving a supermarket. Safety belt use rose 12% above baseline levels when the personal prompt was provided. The prompts used in this study met the criteria suggested by Geller, Winett, and Everett (1982); they were specific and polite, were delivered immediately before the desired behavior, and were designed to occasion an easily emitted behavior.

This simple intervention was easy to implement, and the only cost to the supermarket was a very brief training period for the grocery carriers. Unfortunately, after the study was completed, store management did not continue the policy of having grocery carriers prompt safety belt use. Maintenance might have been achieved if managers obtained reinforcement for making employee and patron safety a priority. Because of the simplicity of the intervention, such personal prompts could be used in a variety of settings to increase safety belt use. However, it will be important to discover effective strategies for convincing managers and decision makers to implement the procedures as long-term policy.

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